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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,754	06/20/2005	Yasutomo Okajima	YAMAP0962US	3153
43076 7590 08/21/2008 MARK D. SARALINO (GENERAL) RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE, NINETEENTH FLOOR CLEVELAND, OH 44115-2191				
EXAMINER LEE, LAURA MICHELLE				
ART UNIT		PAPER NUMBER		
3724				
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08/21/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/519,754

**Applicant(s)**

OKAJIMA ET AL.

**Examiner**

LAURA M. LEE

**Art Unit**

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-18 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) 3, 8-18 and 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/22/2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Drawings***

3. The drawings were received on 4/09/2008. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rayburn (U.S. Patent 2,609,049). Rayburn discloses a cutting system capable of cutting a bonded brittle material (i.e. a thermoplastic compound; see col. 1, lines 44-50) formed by bonding a first brittle material and a second brittle material into a plurality of cut substrates, the system for cutting a substrate of the bonded substrate comprising:

a cutting apparatus (Figure 1) comprising:

a first cutting device (12/14/18) located so as to face the first substrate, and a second cutting device (12/15/19) located so as to face the second substrate;

wherein the first cutting device (12/14/18) comprises a scribing portion (14) in which first scribing means applied pressure on the first substrate to form a scribing line on the first substrate,

the second cutting device (12/15/19) comprises a scribing portion (15) in which the second scribing means applied pressure on the second substrate to form a scribing line on the second substrate,

the first cutting device further comprises a back up portion (12) which faces the second scribing means and moves (rotatably) to apply pressure against a surface of the first substrate when the second scribing means (15) of the scribing portion of the second cutting device scribes the second substrate, in correspondence with the portion to be scribed, and a breaking portion (18) for cutting the first substrate along the scribing line formed on the first substrate, and

the second cutting device further comprises a back up portion (12) which faces the first scribing means and moves (rotatably) to apply pressure against a surface of the second substrate when the first scribing means (14) of the scribing portion of the first cutting device scribes the first substrate, in correspondence with the portion to be scribed, and a breaking portion (19) for cutting the second substrate along the scribing line formed on the second substrate. It is noted that the preamble limitation of being "for cutting a bonded brittle material" that is considered that the Rayburn device is capable of cutting a brittle material, especially as there is no relativity to what is considered a brittle material.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masakazu (JP 10-338534) in view of Fisher (U.S. Patent 4,210,052). Masakazu discloses a cutting system capable of cutting a bonded brittle material (i.e. glass) formed by bonding a first brittle material and a second brittle material into a plurality of cut substrates (i.e. the materials are bonded edge to edge), the system for cutting a substrate of the bonded substrate comprising:

a cutting apparatus (30) comprising:  
a first cutting device (42/43/50) located so as to face the first substrate,  
wherein the first cutting device (42/43/50) comprises a scribing portion (43) in which first scribing means applied pressure on the first substrate to form a scribing line on the first substrate,  
the first cutting device further comprises a back up portion (42) which moves (rotatably) to apply pressure against a surface of the first substrate, in correspondence with the portion to be scribed, and a breaking portion (50) for cutting the first substrate along the scribing line formed on the first substrate.

Masakazu does not disclose a second cutting device. However, attention is directed to the Fisher reference that discloses an alternative glass scoring device. However instead of using one cutting system, Fisher discloses alternatively using a plurality of cutting systems (12) produce uniform score lines in sheet of glass material. second cutting system along with the first cutting system. It similarly would have been obvious to one having ordinary skill in the art at the time of the invention to have equipped Masakazu with a secondary adjacent cutting system as shown by Fisher to be able to make twice as many scoring lines in the same time as it use to make one scoring line. It is also noted that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

Therefore, the modified device of Masakazu discloses a first and second cutting system capable of cutting a bonded substrate, that is bonded edge to edge, with a

second cutting device located so as to face the second substrate (facing in a direction in the plane of the glass substrate); the second cutting device comprises a scribing portion (43') in which the second scribing means is capable of applying pressure on the second substrate to form a scribing line on the second substrate, and the first cutting device further comprises a back up portion (42) which faces the second scribing means (43') (facing in a direction in the plane of the glass substrate), when the second scribing means (43') of the scribing portion of the second cutting device scribes the second substrate; the second cutting device further comprises a back up portion (42') which faces the first scribing means and moves (rotatably) to apply pressure against a surface of the second substrate when the first scribing means (14) of the scribing portion of the first cutting device scribes the first substrate, in correspondence with the portion to be scribed, and a breaking portion ('50) for cutting the second substrate along the scribing line formed on the second substrate. It is noted that as the back up portions (42/42') are always in contact with the substrate, that they are always exerting a pressure on the substrate, such that when either the first or second cutting devices are engaging the respective substrates, the back up portions are applying a respective pressure.

8. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masakazu (JP 10-338534) in view of Fisher (U.S. Patent 4,210,052) and in further view of Shigeyuki et al (JP 2001-261357). The modified device of Masakazu does not disclose a substrate carrying apparatus, which sequentially positions lines to be cut of the bonded substrate with respect to the cutting apparatus. However, attention is

directed to the Shigeyuki device that discloses sheet glass apparatus with a glass-cutting and breaking machine, 14, with an absorption transfer device, 12. Shigeyuki discloses that the transfer device aids in the movement of the workpiece from workstation to workstation without needing to manually manipulate the workpiece and to improve the efficiency of working with the workpiece. It similarly would have been obvious to utilize a conveyance system as taught by Shigeyuki with the apparatus of Masakazu to aid the user in transporting the workpiece to and from the cutting apparatus.

In regards to claim 5, the modified device of Masakazu discloses wherein the substrate carrying apparatus (12) comprises a plurality of tables (pads, 28; see Figures 1 and 3).

In regards to claim 6, the modified device of Masakazu discloses wherein the tables (28) are independently movable (removable).

In regards to claim 7, the modified device of Masakazu discloses wherein the tables comprise adsorption holes for adsorbing the bonded substrate (connected to suction pump; not illustrated; paragraph [0013]).

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/  
Examiner, Art Unit 3724  
8/15/2008  
/Boyer D. Ashley/  
Supervisory Patent Examiner, Art Unit 3724